M 6.3, 83 km NNE of Tocopilla, Chile

PAGER
Version 5
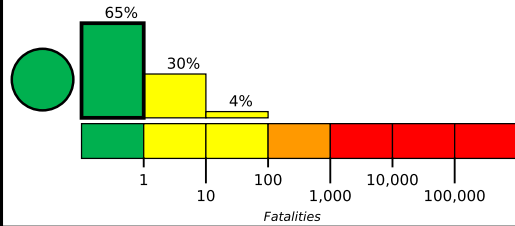
Origin Time: 2020-09-11 07:35:57 UTC (Fri 04:35:57 local)
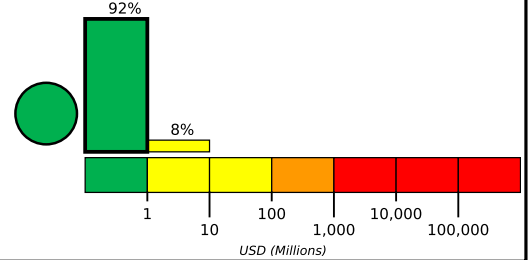Location: 21.3928° S 69.8943° W Depth: 51.0 km

Created: 14 hours, 14 minutes after earthquake

Estimated Fatalities

Green alert for shaking-related fatalities and economic losses. There is a low likelihood of casualties and damage.

65%
30%
4%

1   10   100   1,000   10,000   100,000
Fatalities

Estimated Economic Losses

92%
8%

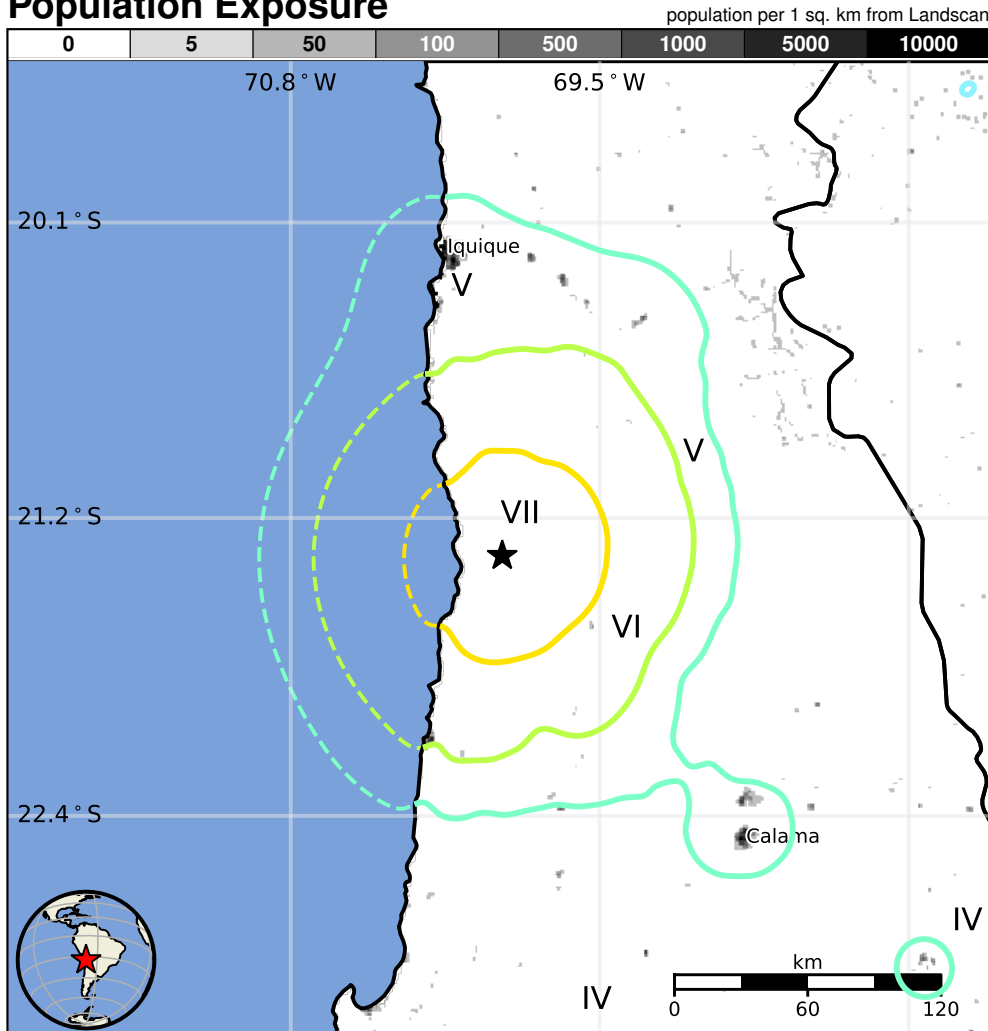1   10   100   1,000   10,000   100,000
USD (Millions)

Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k=x1000)		—*	—*	51k	264k	266k	1k	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		I	II-III	IV	V	VI	VII	VIII	IX	X+
PERCEIVED SHAKING		Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy	V. Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy	V. Heavy

*Estimated exposure only includes population within the map area.

Population Exposure

population per 1 sq. km from Landscan

| 0 | 5 | 50 | 100 | 500 | 1000 | 5000 | 10000 |

Structures

Overall, the population in this region resides in structures that are resistant to earthquake shaking, though vulnerable structures exist. The predominant vulnerable building types are adobe block and rubble/field stone masonry construction.

Historical Earthquakes

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
2001-07-24	216	6.3	V(36k)	1
1987-03-05	334	7.5	VII(46k)	1
1981-06-21	134	5.7	VII(6k)	10

Recent earthquakes in this area have caused secondary hazards such as landslides that might have contributed to losses.

Selected City Exposure

from GeoNames.org

MMI	City	Population
V	San Pedro de Atacama	2k
VI	Tocopilla	24k
V	**Calama**	**143k**
VI	**Iquique**	**227k**

bold cities appear on map.   (k = x1000)

PAGER content is automatically generated, and only considers losses due to structural damage.
Limitations of input data, shaking estimates, and loss models may add uncertainty.
https://earthquake.usgs.gov/earthquakes/eventpage/us7000blm2#pager

Event ID: us7000blm2